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TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-01-7367

TAT-02-F-05391 **MEMORANDUM**

TO: Eugene Dominach
Removal Action Branch, U.S. EPA

FROM: John Johnson, TAT J.J
Julian Hill, TAT QA/QC J.H

SUBJECT: Tidewater Baling

DATE: July 31, 1989

This letter report is in reference to the Tidewater Bailing Site sample analysis tabulation. It is a comparison of four sampling trips performed by the New Jersey Department of Environmental Protection (NJDEP) and by Dresdner, Robin & Associates, and TAT at the Ironbound Recreational Facility in Newark, New Jersey.

At the request of the City of Newark, the firm of Dresdner, Robin & Associates collected three surficial soil samples from the Ironbound Recreational Facility football field on September 11, 1987 (see figure 1). The sample taken from the north end of the field showed a PCB contamination level of 19 PPM. Based on these results the City of Newark closed the recreational facility.

On April 11 & 12, 1988 the NJDEP collected 64 soil samples from 47 locations and analyzed them for PCB contamination. Samples obtained from the football field were taken at two different depths (see figure 2). The first depth was 0" - 6" and labeled "S" while the second depth was 6" - 15" and labeled "D". Samples taken from the baseball/soccer field were at a single depth of 0" - 6" (see figure 3). Sample number EP-046 did not have laboratory results. The analytical results are tabulated in table 1. The results show significant PCB contamination at the 6" - 15" depth. Aroclor 1248 was the most prevalent PCB detected. Sample number EP-006-D contained 120 PPM Aroclor 1248. Only one sample , EP-009-S, revealed contamination at the 0" - 6" depth (2.6 PPM). The results from the baseball/soccer field show limited levels of PCB contamination. PCBs were detected in only three samples at a concentration significantly lower than 1 PPM.

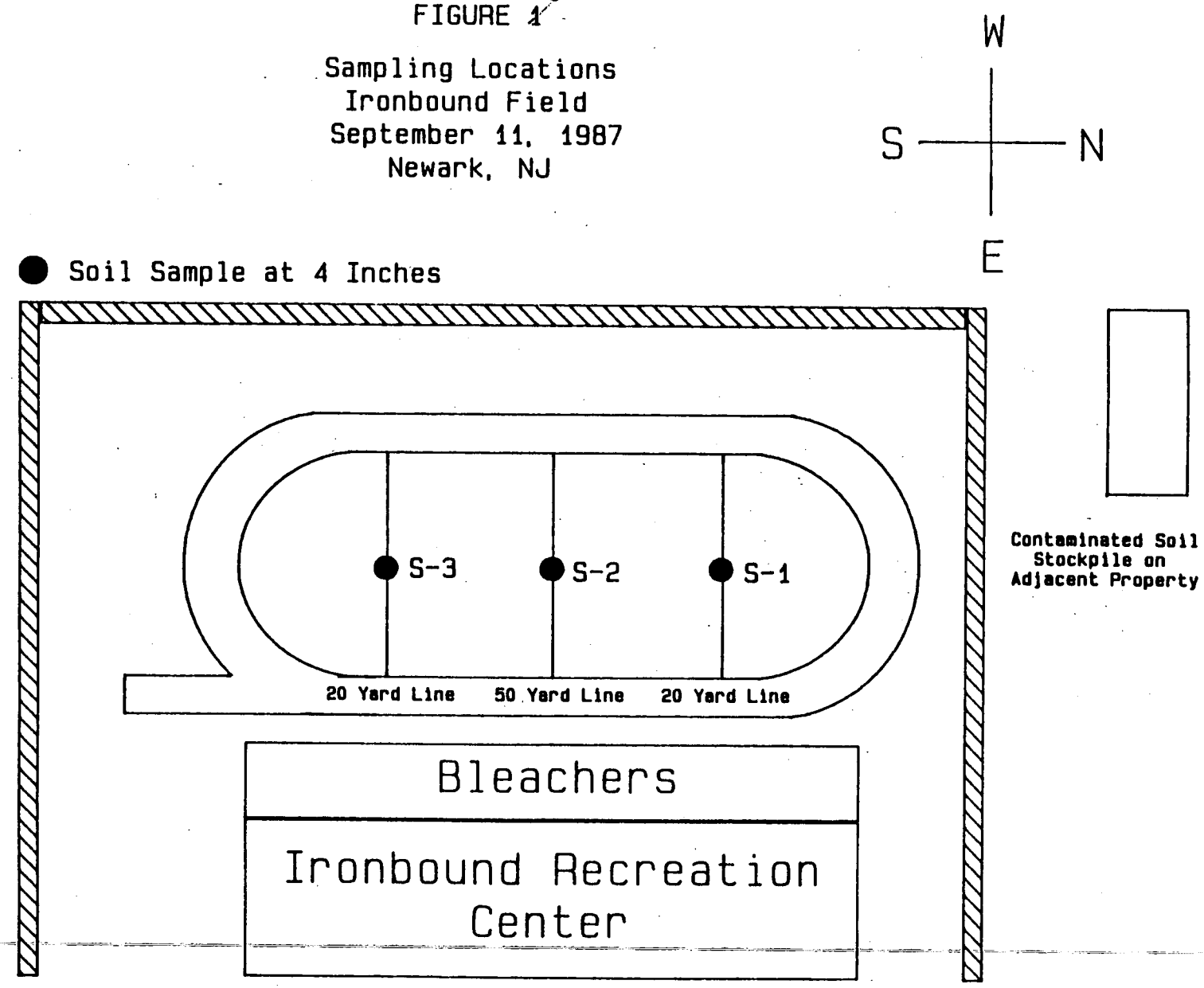
On November 29, 1988, Dresdner, Robin, & Associates, an environmental consulting firm, obtained 10 samples from the Ironbound Recreational Facility at the direction of the City of Newark Department of Engineering. The samples were taken from an area surrounding NJDEP sample EP-009 (see figure 2). These samples were analyzed for PCB contamination and the results are given in table 2. Sample number 08 showed the greatest amount of surface contamination at 3.9 PPM total PCBs whereas sample number 01 the least at 0.41 PPM.

TAT was mobilized by the EPA to collect 16 samples from both the recreational facility and the Tidewater Baling Facility on May 18, 1989. These samples were analyzed for PCBs, Heavy Metals, Total Petroleum Hydrocarbons, and Phenols. The sample locations can be seen in figure 5 and the analytical results are given in table 3. These results show high PCB contamination on the Tidewater Baling premises and in the marsh area. Sample SA-7, taken from just inside the earthen berm separating Tidewater Baling from the recreational facility, shows a PCB level of 308 PPM. Nearly all of the samples showed high concentrations of heavy metals, especially lead. Soil samples taken from the baling facility and the marsh showed a high degree of total petroleum hydrocarbons. The phenol concentrations were low throughout the site.

The analytical results from all four sampling trips show high degrees of contamination at the Ironbound Recreational Facility. The four analyses generally agree with one another. The last analysis showed similar contamination at the Tidewater Baling Facility as that found at the recreational facility.

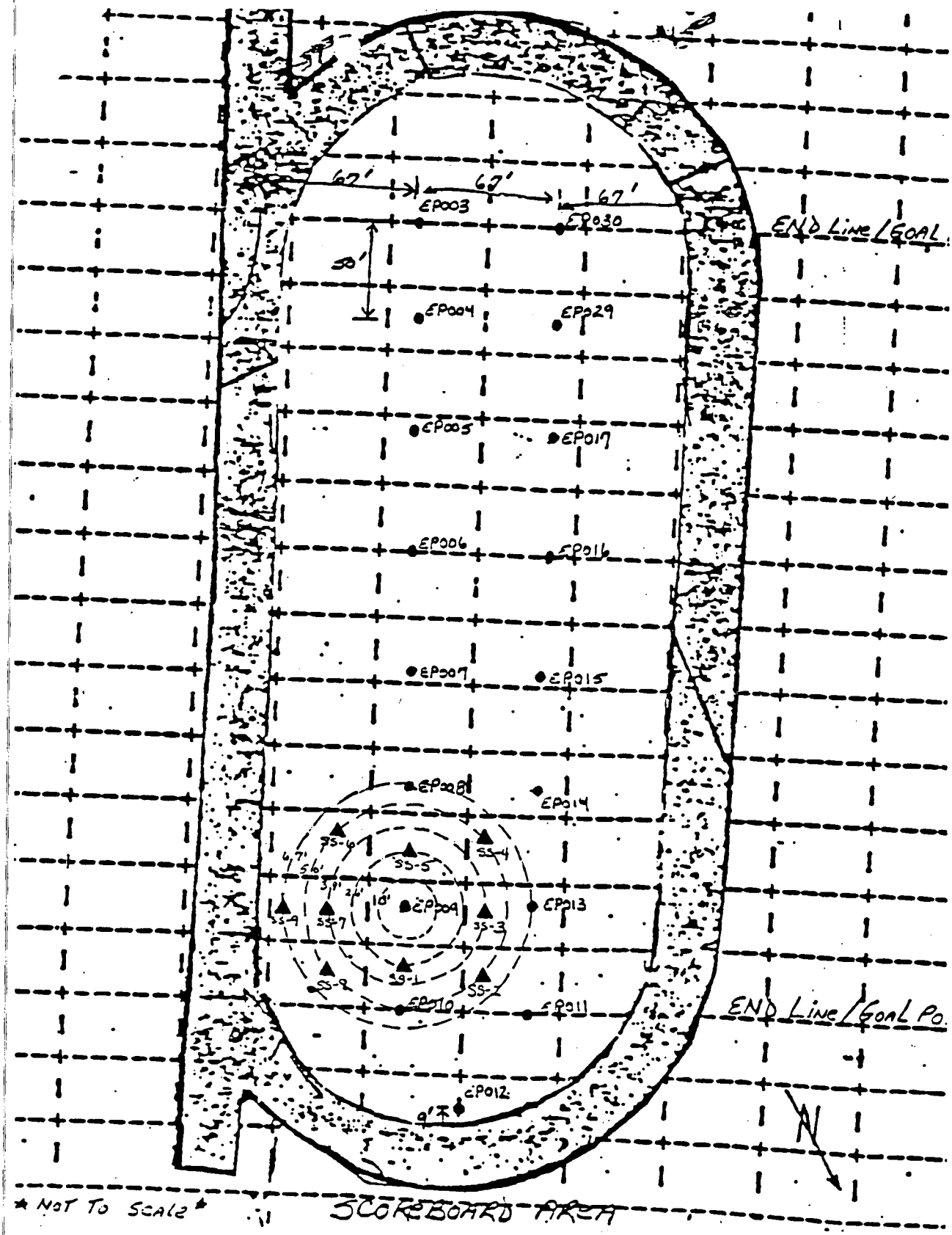
FIGURE 13

Sampling Locations
Ironbound Field
September 11, 1987
Newark, NJ



Source: Dresdner, Robin & Associates

Not to scale



▲ SS-1 SOIL SAMPLE (DRA)

● EP 009 PREVIOUS SOIL SAMPLE (DEP)

FIGURE ❷

NEWARK IRONBOUND
RECREATION CENTER
FOOTBALL FIELD

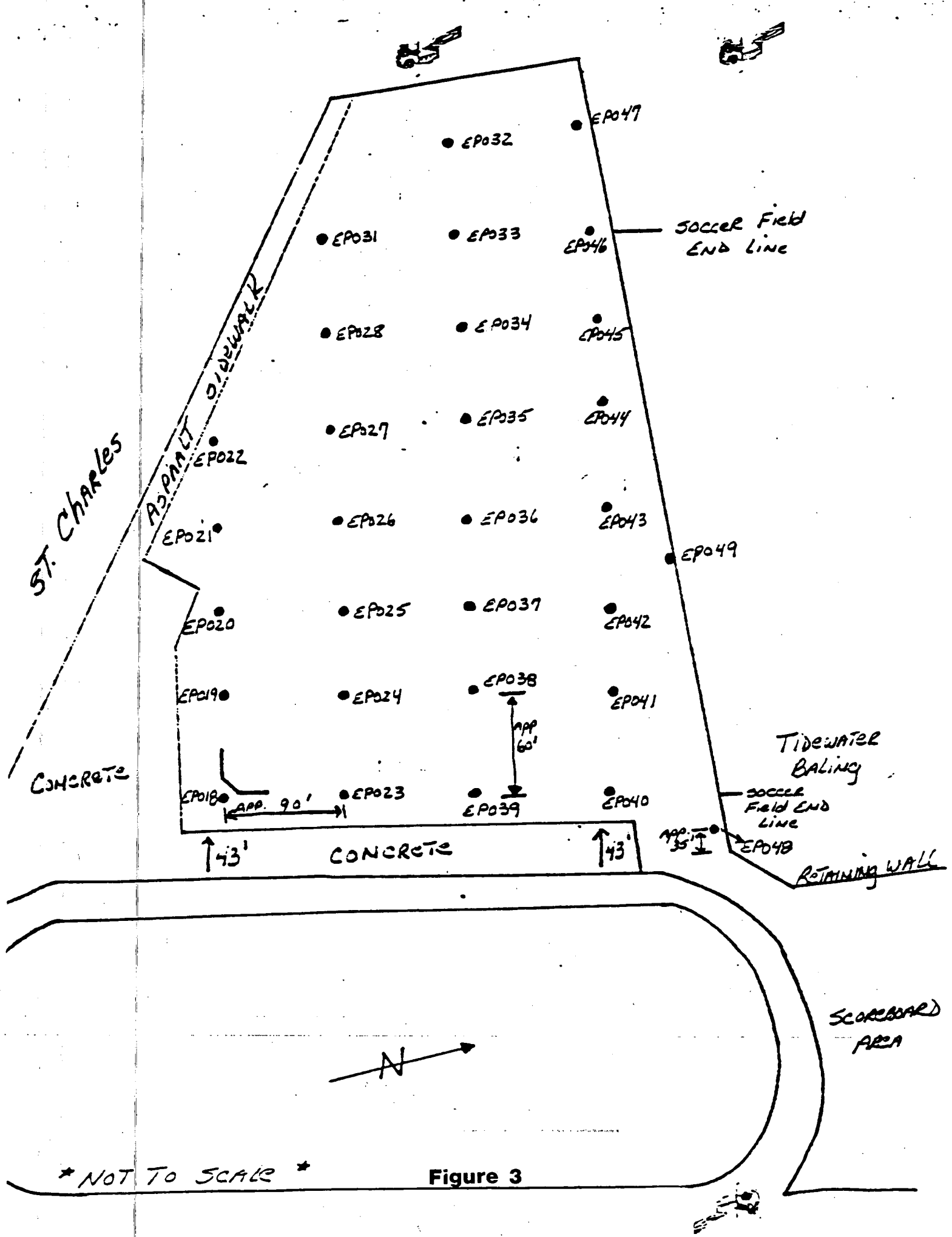

EP047
EP032
EP031
EP033
EP046
SOCCER FIELD END LINE
EP028
EP034
EP045
EP027
EP035
EP044
ST. CHARLES
ASPHALT SIDEWALK
EP022
EP021
EP026
EP036
EP043
EP049
EP020
EP025
EP037
EP042
EP019
EP024
EP038
EP041
APP 60'
TIDEWATER BALING
CONCRETE
EP018
APP. 90'
EP023
EP039
EP040
SOCCER FIELD END LINE
APP. 35'
EP048
43'
CONCRETE
43'
RETAINING WALL
SCOREBOARD AREA
N
* NOT TO SCALE *

Figure 3

Table 1. TIDEWATER DATA TABULATION

PESTICIDES (ug/kg)	EP-042	EP-043	EP-044	EP-045	EP-046	EP-047	EP-048	EP-049
					missing			
Aroclor 1016								
Aroclor 1221								
Aroclor 1232								
Aroclor 1242								
Aroclor 1248								
Aroclor 1254								
Aroclor 1260								

Table 1. TIDEWATER DATA TABULATION

PESTICIDES (ug/kg)	EP-003-D	EP-003-S	EP-004-D	EP-004-S	EP-005-D	EP-005-S	EP-006-D	EP-006-S	EP-007-D	EP-007-S	EP-008-D	EP-008-S	EP-009-D	EP-009-S
Aroclor 1016														
Aroclor 1221														
Aroclor 1232														
Aroclor 1242														
Aroclor 1248			29000		5000		120000						31000	2600
Aroclor 1254														
Aroclor 1260													1800	

PESTICIDES (ug/kg)	EP-010-D	EP-010-S	EP-011-D	EP-011-S	EP-012-D	EP-012-S	EP-013-D	EP-013-S	EP-014-D	EP-014-S	EP-015-D	EP-015-S	EP-016-D	EP-016-S
Aroclor 1016														
Aroclor 1221														
Aroclor 1232														
Aroclor 1242														
Aroclor 1248	15000		11000											
Aroclor 1254														
Aroclor 1260	1100		2700		1000									

PESTICIDES (ug/kg)	EP-017-D	EP-017-S	EP-018	EP-019	EP-020	EP-021	EP-022	EP-023	EP-024	EP-025	EP-026	EP-027	EP-028	EP-029S
Aroclor 1016														
Aroclor 1221														
Aroclor 1232														
Aroclor 1242														
Aroclor 1248														
Aroclor 1254														
Aroclor 1260						560	400J							

PESTICIDES (ug/kg)	EP-029D	EP-030S	EP-030D	EP-031	EP-032	EP-033	EP-034	EP-035	EP-036	EP-037	EP-038	EP-039	EP-040	EP-041
Aroclor 1016														
Aroclor 1221														
Aroclor 1232														
Aroclor 1242														
Aroclor 1248														
Aroclor 1254														
Aroclor 1260										310J				

Table 2. TIDEWATER DATA TABULATION

PESTICIDES (mg/kg)	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10 blank
Aroclor 1016										
Aroclor 1221										
Aroclor 1232										
Aroclor 1242										
Aroclor 1248	0.035				0.13	1.2	0.15	1.4	0.36	
Aroclor 1254	0.17	0.5	0.29	0.14	0.16	1.1	0.23	1.9	0.54	
Aroclor 1260	0.20		0.35	0.13	0.09	0.02	0.18	0.6	0.23	

M-051 C

NE ..SEY DEPARTMENT OF ENVIRONMENTAL PRC ..ION
DIVISION OF WASTE MANAGEMENT

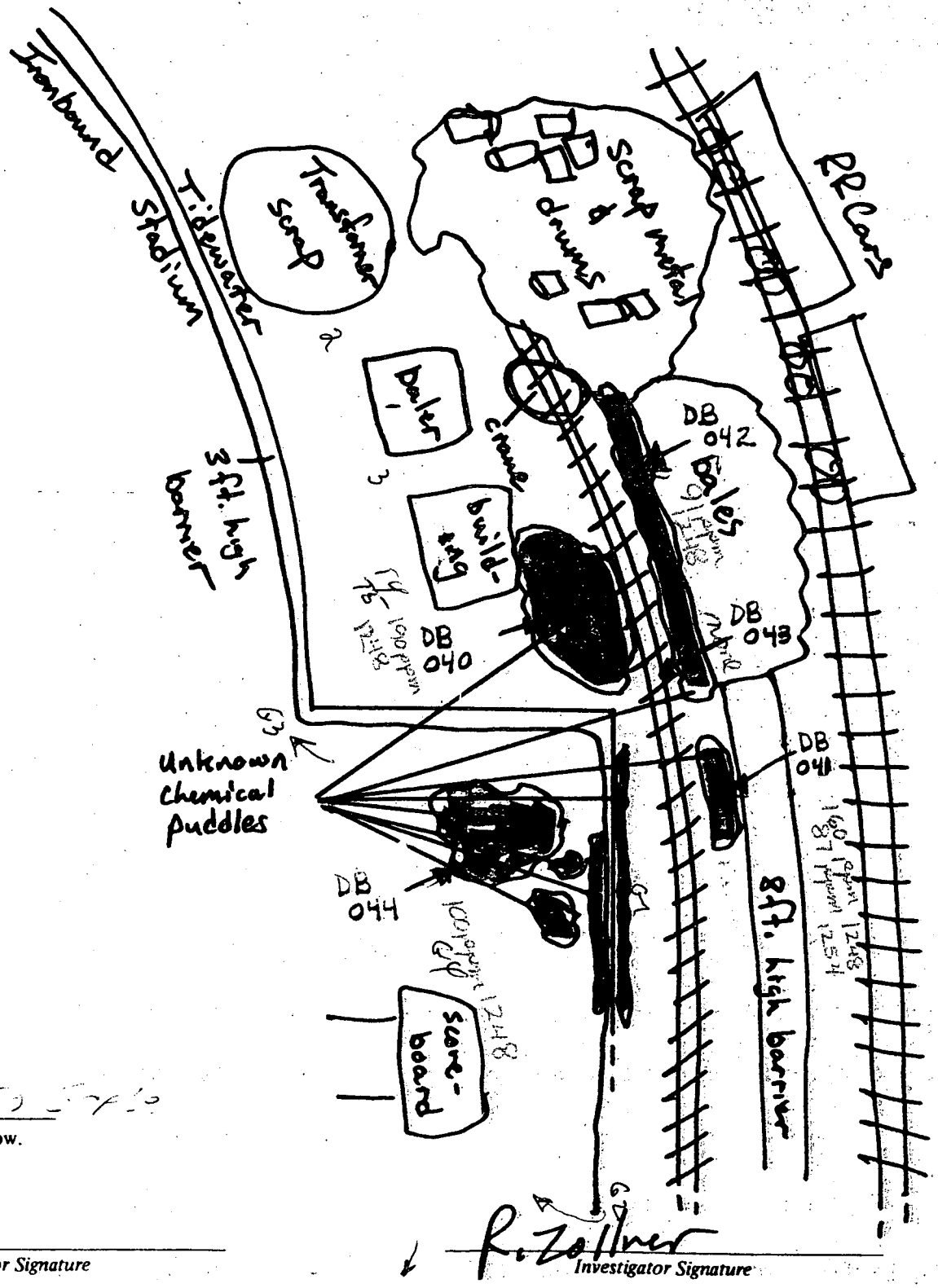
INVESTIGATION

CASE # 86-08-12-04M

DATE 8/18/86

SKETCH

Figure 1



SCALE: NOT TO SCALE

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R. Zollner

Supervisor Signature *Investigator Signature*

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